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PATENT SPECIFICATION

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(54) FOODSTUFF COMPOSITIONS

(71) I, MAURICE HANSEN, of Tremaine, 21 Milbourne Lane, Esher, Surrey KT10 9EB, England, a British Subject, do hereby declare the invention for which I pray that a patent may be granted to me, and the method by which it is to be performed, to be particularly described in and by the following statement:—

The present invention is concerned with improvements in or relating to foodstuffs.

It has recently become generally accepted that many of the diseases of Western civilisation are due to a dietary change which has occurred since the introduction of roller milling some 100 years ago. The introduction of roller milling meant that white flour was generally available at an economic price: indeed, bread made from white flour now accounts for about 97% of all bread consumption.

Some 35 years ago, it was found that the addition of bran to the diet of sailors avoided constipation and the theory was also advanced at that time that diseases such as diabetes mellitus might be related to too much sugar and too little fibre in the diet.

As recently as 1971, Painter and Burkitt (B.M.J., 22nd May, 1971) advanced the theory that diverticulosis, the second most common disease of the colon, might be caused by the lack of roughage in the diet: this theory was subsequently confirmed clinically by Painter (see also Burkitt, B.M.J., 3rd February, 1973).

Indeed, Burkitt advanced the view that the absence of cereal fibre in the diet was a causative factor not only for diverticular disease but possibly also for a number of other diseases, including appendicitis, cancer of the colon, polyps, ulcerative colitis, varicose veins, deep vein thrombosis and haemorrhoids. He also felt that there were links with other diseases such as a hiatus hernia, coronary heart disease, gall bladder disease, obesity and diabetes mellitus. Subsequent investigations have shown that many of these ideas may well be true and they are currently the subject of medical investigation.

The actual quantity of fibre, which is conveniently taken in the form of bran, such as

wheat or rice bran, and other sources, varies from person to person but wheat bran is usually employed as the reference by which other forms of fibre are measured. Once a person has begun to take bran, it is usually recommended that he does so for life and at a dosage which suits him.

However, one problem is that bran is not very palatable and many persons do not like its rough, harsh flavour with the result that they cease to take it. Bran is currently available in an extruded form for use as a supplement to conventional breakfast cereals and it is also available in tablet form but both forms are not particularly easy to take. In the case of bran in tablet form, there is the added psychological disadvantage that it appears to be a medicine and not a dietary supplement. Furthermore, the forms of bran at present available make it somewhat difficult accurately to dose the daily intake of bran.

The actual daily requirement of bran for the average person is from 10 to 30 g. per day.

It is an object of the present invention to provide bran in a pleasant tasting and convenient form which also enables the daily intake of bran to be measured with a reasonable degree of accuracy.

I have now found that when bran is thoroughly integrated and mechanically mixed, preferably by mincing, with dried fruit, optionally with the addition of lecithin and other flavourings and/or additives, and thereafter made into bars, rods or like shaped bodies, then the bran is in a convenient and palatable form containing a known quantity of bran.

Thus, according to the present invention, there is provided a foodstuff composition in the form of a shaped body comprising an intimate and substantially homogeneous mixture of bran and dried fruit.

The bran-containing bodies according to the present invention have a consistent flavour and a good shelf life.

The shaped bodies according to the present invention are preferably in the form of scored rods or bars in the manner of a conventional bar of chocolate since this not only makes it easier to take but also greatly simplifies

measurement of the actual intake of bran.

When the amount of bran present is large in comparison with the amount of dried fruit, it is also advantageous to add an edible moisturing agent, such as honey, treacle or a sugar syrup, such as cane sugar syrup or maple syrup.

If desired, the bran-containing bodies according to the present invention can also contain a variety of other additives, such as pectin, which may also exert a beneficial effect upon the gastrointestinal tract and appears to potentiate the action of the bran, as well as nuts, chocolate, vitamins, mineral supplements, spices, flavourings and natural and synthetic sweetening agents such as sucrose, fructose, glucose, saccharin and cyclamates.

If desired, a preservative, such as sodium benzoate or sulphur dioxide, can also be added in conventional amounts.

Although the quantity of bran, referred to the quantity of dried fruit, can vary within wide limits, it is preferable to use 1 part by weight of bran to at least 1 part by weight of dried fruit, a weight ratio of bran to dried fruit of 1 to at least 3 being especially preferred.

Any edible form of bran can be used, wheat and rice bran being preferred because of ready availability thereof.

Similarly, any kind of dried fruit can be used, for example, currants, sultanas, raisins, dates, apricots, plums, apples, pears and the like, it being understood that, if desired, a mixture of various dried fruits can be used.

In order to achieve the beneficial effects of the present invention, it is essential that the ingredients are thoroughly mixed together and mechanically integrated, for example by means of a powerful mincing machine.

The mixture thus obtained can then be formed into suitably shaped bodies such as bars, rods and the like, in conventional manner, the bodies thus produced preferably being of a size which is easy to handle, for example in the manner of a conventional bar of chocolate.

The following Examples are given for the purpose of illustrating the present invention:

Example 1.

100 g. wheat bran
5 g. lecithin
150 g. currants
150 g. sultanas

The mixture is thoroughly homogenised in a powerful mincing machine and then formed into bars, each of which contains 10 or 20 g. of bran.

Example 2.

200 g. dried apricots
100 g. currants

140 g. wheat bran 25%
5 g. lecithin
110 g. honey 20%
The mixture is worked up as in Example 1.

Example 3.

100 g. dates
100 g. sultanas
50 g. chopped walnuts
50 g. honey 12.5
100 g. wheat bran
5 g. lecithin
The mixture is worked up as in Example 1.

WHAT I CLAIM IS:—

1. A foodstuff composition in the form of a shaped body comprising an intimate and substantially homogeneous mixture of bran and dried fruit. 75
2. A composition according to claim 1, in the form of a bar or rod. 80
3. A composition according to claim 2, wherein said bar or rod is scored.
4. A composition according to any of the preceding claims, comprising 1 part by weight of bran to at least 1 part by weight of dried fruit. 85
5. A composition according to claim 4, comprising 1 part by weight of bran to at least 3 parts by weight of dried fruit. 90
6. A composition according to any of the preceding claims, wherein an edible moisturing agent is also present.
7. A composition according to claim 6, wherein the moisturing agent is honey, treacle or a sugar syrup. 95
8. A composition according to any of the preceding claims, wherein lecithin is additionally present.
9. A composition according to any of the preceding claims, wherein there is additionally present at least one member selected from pectin, nuts, chocolate, vitamins, mineral supplements, spices, flavourings and natural and synthetic sweetening agents. 100
10. A composition according to any of the preceding claims, wherein a preservative is additionally present.
11. A composition according to claim 10, wherein the preservative is sodium benzoate or sulphur dioxide. 110
12. A composition according to any of the preceding claims, wherein the bran present therein is wheat or rice bran.
13. A foodstuff composition according to claim 1, substantially as hereinbefore described and exemplified. 115
14. A process for producing a foodstuff composition according to claim 1, wherein bran and dried fruit are thoroughly integrated and mixed to give a substantially homogeneous mixture, said mixture then being 120

made into shaped bodies in known manner.

15. A process according to claim 14, wherein integration and mixing is carried out in a mincing machine.

5 16. A process according to claim 14 for producing a foodstuff composition, substantially as hereinbefore described and exemplified.

17. A foodstuff composition, whenever pro-

duced by the process according to any of 10
claims 14 to 16.

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